What is claimed is:

1. A pad conditioning system for conditioning a polishing pad in conjunction with polishing a workpiece, the pad conditioning system comprising:

a pad conditioning head configured to condition a polishing pad;

a polishing liquid supply port included in the pad conditioning head, wherein the polishing liquid supply port is configured to selectively discharge a polishing liquid; and

a positioning unit coupled with the pad conditioning head, wherein the positioning unit is configured to move the pad conditioning head into contact with the polishing pad to condition the polishing pad, and to simultaneously work the polishing liquid discharged from the polishing liquid supply port into the conditioned polishing pad.

2. The pad conditioning system of claim 1, wherein the polishing liquid supply port is disposed on the pad conditioning head so that the polishing liquid is to be discharged between the pad conditioning head and the polishing pad.

3. The pad conditioning system of claim 1, wherein the pad conditioning head includes a substantially flat surface configured to contact the polishing pad, the polishing liquid supply port formed in the substantially flat surface.

4. The pad conditioning system of claim 1, wherein the directing member is configured to move the pad conditioning head into contact with the polishing pad with sufficient contact pressure to roughen the polishing pad, the polishing liquid worked into features in the polishing pad that are one of created and embellished when the polishing pad is roughened.

5. The pad conditioning system of claim 1, wherein the polishing liquid is a slurry of liquid that includes suspended abrasive particles.

6. The pad conditioning system of claim 1, wherein the directing member is configured to maintain contact between the pad conditioning head and the polishing

pad and selectively move the pad conditioning head in a predetermined pattern around on the surface of the polishing pad.

7. The pad conditioning system of claim 1, wherein a flow rate of the polishing liquid is selectively variable as a function of a position of the pad conditioning head on the polishing pad.

8. The pad conditioning system of claim 1, wherein a flow rate of the polishing liquid is selectively variable as a function of a process parameter associated with polishing of a workpiece and a position of the pad conditioning head on the polishing pad.

9. A pad conditioning system for conditioning a polishing pad in conjunction with polishing of a workpiece, the pad conditioning system comprising:

a conditioning element having a conditioning surface, wherein the conditioning surface is configured to be pressed into a polishing pad to condition the polishing pad; and

a passageway formed in the conditioning element, the passageway having an inlet and an outlet, wherein the outlet is formed in the conditioning surface so that a polishing liquid to be supplied to the inlet during conditioning of the polishing pad is discharged between the conditioning surface and the polishing pad.

10. The pad conditioning system of claim 9, further comprising a polishing liquid supply line configured to supply polishing liquid to the inlet of the passageway.

11. The pad conditioning system of claim 9, wherein the outlet is a plurality of outlets and the passageway comprises a supply manifold and a plurality of discharge passages, wherein each of the discharge passages form one of the outlets.

12. The pad conditioning system of claim 9, wherein the inlet is on a mounting surface of the conditioning element that is opposite the conditioning surface.

13. The pad conditioning system of claim 9, wherein the conditioning element comprises a disc having one flat surface that is the conditioning surface and another flat surface that is a mounting surface for mounting the disc to a pad conditioning head.

14. The pad conditioning system of claim 9, further comprising a pad conditioning head coupled with the conditioning element, and a positioning unit coupled with the pad conditioning head, wherein the pad conditioning head is configured to be place in contact with the polishing pad by the positioning unit so that the conditioning element is pressed into the polishing pad.

15. The pad conditioning system of claim 14, wherein the positioning unit is configured to move the pad conditioning head in a determined pattern on the surface of the polishing pad.

16. The pad conditioning system of claim 9, wherein a flow rate of the polishing liquid is dynamically varied as a function of a process parameter associated with polishing a workpiece.

17. The pad conditioning system of claim 16, wherein the process parameter is a temperature of the workpiece.

18. A pad conditioning system for conditioning a polishing pad in conjunction with polishing of a workpiece, the pad conditioning system comprising:

a housing;

a conditioning element detachably coupled with the housing, the conditioning element formed with a port disposed on a surface of the conditioning element;

a passageway formed in the conditioning element with an inlet and an outlet, wherein the port is the outlet of the passageway; and

a polishing liquid supply line configured to supply polishing liquid to the inlet of the passageway,

wherein the surface of the conditioning element is configured to roughen a polishing pad and work the polishing liquid discharged from the outlet into the roughened polishing pad.

19. The pad conditioning system of claim 18, wherein the housing comprises a mounting plate, the conditioning element rigidly mounted on the mounting plate so that the mounting plate and the conditioning element are configured to gimbal together.

20. The pad conditioning system of claim 19, further comprising a gimbal coupler included in the polishing liquid supply line, wherein the gimbal coupler is flexible to enable the mounting plate and the conditioning element to gimbal without one of stress and kinking of the liquid supply line.

21. The pad conditioning system of claim 18, further comprising a positioning unit, wherein the positioning unit is configured to maneuver the housing to press the conditioning element into the polishing pad, the positioning unit further configured to maneuver the housing to move the conditioning element in a determined pattern around a surface of the polishing pad to roughen the surface of the polishing pad and to embed polishing liquid in the roughened surface.

22. The pad conditioning system of claim 18, wherein the housing and the conditioning element are configured to rotate while being pressed into the polishing pad, and the polishing liquid supply line includes a rotary union so that a portion of the polishing liquid supply line is rotatable with the conditioning element.

23. The pad conditioning system of claim 18, wherein the port is a plurality of ports that are arranged on the surface of the conditioning element, and each of the ports may selectively discharge polishing liquid.

24. The pad conditioning system of claim 18, wherein the polishing pad comprises a porous polishing pad and the polishing liquid is forced into a plurality of pores in the porous polishing pad by the conditioning element.

25. The pad conditioning system of claim 18, wherein the polishing liquid is forced into at least one of micro channels, inequalities, unevenness, ridges, valleys projections, grooves and channels formed in the polishing pad by the conditioning element.

26. A method of conditioning a polishing pad in conjunction with polishing of a workpiece, the method comprising:

pressing a conditioning surface of a pad conditioning head into a polishing pad to condition the polishing pad,

discharging a polishing liquid from the conditioning surface so that the polishing liquid is between the conditioning surface and the polishing pad; and

working the polishing liquid into the polishing pad with the conditioning surface at the same time the polishing pad is being conditioned.

27. The method of claim 26, wherein pressing a conditioning surface comprises gimbaling a portion of the pad conditioner head so that the conditioning surface remains substantially parallel with the polishing pad.

28. The method of claim 26, wherein pressing a conditioning surface comprises repositioning the pad conditioning head in various locations on the surface of the polishing pad.

29. The method of claim 26, wherein discharging a polishing liquid comprises selectively discharging polishing liquid between the conditioning surface and polishing pad in the area of the polishing pad being conditioned.

30. The method of claim 26, wherein discharging a polishing liquid comprises dynamically varying the flow rate of the polishing liquid being discharged as a function of the position of the pad conditioning head on the polishing pad.

31. The method of claim 26, wherein discharging a polishing liquid comprises dynamically varying the flow rate of the polishing liquid being discharged as a function of an operational parameter.

32. The method of claim 26, wherein discharging a polishing liquid comprises dynamically varying the flow rate of the polishing liquid being discharged as a function of the position of the pad conditioning head on the polishing pad and an operational parameter.

33. The method of claim 26, wherein working the polishing liquid into the polishing pad comprises massaging the polishing liquid into features that are one of formed and embellished during conditioning.

34. The method of claim 26, wherein working the polishing liquid into the polishing pad comprises forcing the polishing liquid into features of the polishing pad, wherein the features include grooves and channels.

35. The method of claim 26, wherein working the polishing liquid into the polishing pad comprises massaging the polishing liquid into the pores of the polishing pad.